## WHAT IS CLAIMED IS:

- 1 A method for transferring data using multiple backup components,
  2 comprising:
  3 assigning responsibility for a portion of data to a first backup component; and
  4 when a data update for the portion of data is received at the first backup
- 5 component from a primary source, mirroring the data update to a second backup
- 6 component that is not assigned responsibility for the portion of data.
- 1 2. The method of claim 1, further comprising:
- when the data update for the portion of data is received at the second backup
- 3 component that is not assigned responsibility for the portion of data from the primary
- 4 source, forwarding the data update to the first backup component.
- 1 3. The method of claim 1, further comprising:
- when the data update for the portion of data is received at the first backup
- 3 component from the second backup component that is not responsible for the portion of
- 4 data,
- 5 assigning a sequence number to the data update; and
- 6 acknowledging receipt of the data update by sending the sequence number
- 7 to the second backup component.
- 1 4. The method of claim 1, further comprising:
- when the data update for the portion of data is received at the second backup
- 3 component that is not responsible for the portion of data, storing the data update.
- 1 5. The method of claim 1, wherein the first backup component and the
- 2 second backup component communicate over a first communication path and wherein the

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- first backup component and second backup component communicate with the primary
  source over a second communication path.
- 1 6. The method of claim 1, wherein the first backup component, the second 2 backup component, and the primary source communicate over one communication path.
- 1 7. The method of claim 1, further comprising:
- 2 wherein each of the multiple backup components maintains a mapping of which
- 3 backup component is assigned to particular portions of data.
- 1 8. The method of claim 1, wherein when one of the multiple backup
- 2 components mirrors the data update to another backup component, further comprising:
- 3 sending a sequence identifier with the mirrored data update; and
- 4 keeping track of which backup component was sent the data update.
- 1 9. The method of claim 1, wherein when one of the multiple backup
- 2 components receives a mirrored data update from another backup component, further
- 3 comprising:
- 4 receiving a sequence identifier with the mirrored data update; and
- 5 keeping track of which backup component sent the data update.
- 1 10. A method for processing data updates with a group of backup
- 2 components, comprising:
- determining that a new backup component is active;
- 4 near an end of a consistent transactions set formation period, assigning
- 5 responsibility for one or more portions of data to each backup component in the group
- 6 and to the new backup component; and

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1 during a next consistent transactions set formation period, processing data updates 2 with each backup component in the group and the new backup component. 1 11. The method of claim 10, wherein the new backup component becomes 2 part of the group of backup components. 1 12. A method for processing data updates with a group of backup 2 components, comprising: 3 determining that a first backup component in the group is no longer available; and 4 reassigning portions of data for which the first backup component had been 5 assigned responsibility to each of the other backup components in the group. 1 13. The method of claim 12, wherein each of the backup components in the 2 group that was mirroring data updates for the first backup component mirrors the data 3 updates to the backup components that were assigned responsibility for the portions of 4 data to which the data updates were made. 14. 1 The method of claim 12, wherein each of the backup components that is 2 reassigned a portion of data and that has data updates for the portion of data mirrors the 3 data updates to another backup component. 1 15. The method of claim 12, wherein each of the backup components in the 2 group that had mirrored data to the first backup component mirror data updates to another 3 backup component.

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1	16. An article of manufacture including program logic for transferring data
2	using multiple backup components, wherein the program logic causes operations to be
3	performed, the operations comprising:
4	assigning responsibility for a portion of data to a first backup component; and
5	when a data update for the portion of data is received at the first backup
6	component from a primary source, mirroring the data update to a second backup
7	component that is not assigned responsibility for the portion of data.
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1	17. The article of manufacture of claim 16, wherein the operations further
2	comprise:
3	when the data update for the portion of data is received at the second backup
4	component that is not assigned responsibility for the portion of data from the primary
5	source, forwarding the data update to the first backup component.
1	18. The article of manufacture of claim 16, wherein the operations further
2	comprise:
3	when the data update for the portion of data is received at the first backup
4	component from the second backup component that is not responsible for the portion of
5	data,
6	assigning a sequence number to the data update; and
7	acknowledging receipt of the data update by sending the sequence number
8	to the second backup component.
1	19. The article of manufacture of claim 16, wherein the operations further
2	comprise:
3	when the data update for the portion of data is received at the second backup
4	component that is not responsible for the portion of data, storing the data update.

1	20. The article of manufacture of claim 16, wherein the first backup
2	component and the second backup component communicate over a first communication
3	path and wherein the first backup component and second backup component
4	communicate with the primary source over a second communication path.
1	21. The article of manufacture of claim 16, wherein the first backup
2	component, the second backup component, and the primary source communicate over
3	one communication path.
1	22. The article of manufacture of claim 16, wherein the operations further
2	comprise:
3	wherein each of the multiple backup components maintains a mapping of which
4	backup component is assigned to particular portions of data.
1	23. The article of manufacture of claim 16, wherein when one of the multiple
2	backup components mirrors the data update to another backup component, and wherein
3	the operations further comprise:
4	sending a sequence identifier with the mirrored data update; and
5	keeping track of which backup component was sent the data update.
1	24. The article of manufacture of claim 16, wherein when one of the multiple
2	backup components receives a mirrored data update from another backup component,
3	and wherein the operations further comprise:
4	receiving a sequence identifier with the mirrored data update; and
5	keeping track of which backup component sent the data update.

1	25. An article of manufacture including program logic for processing data
2	updates with a group of backup components, wherein the program logic causes
3	operations to be performed, the operations comprising:
4	determining that a new backup component is active;
5	near an end of a consistent transactions set formation period, assigning
6	responsibility for one or more portions of data to each backup component in the group
7	and to the new backup component; and
8	during a next consistent transactions set formation period, processing data updates
9	with each backup component in the group and the new backup component.
1	26. The article of manufacture of claim 25, wherein the new backup
2	component becomes part of the group of backup components.
1	27. An article of manufacture including program logic for processing data
2	updates with a group of backup components, wherein the program logic causes
3	operations to be performed, the operations comprising:
4	determining that a first backup component in the group is no longer available; and
5	reassigning portions of data for which the first backup component had been
6	assigned responsibility to each of the other backup components in the group.
1	28. The article of manufacture of claim 27, wherein each of the backup
2	components in the group that was mirroring data updates for the first backup component
3	mirrors the data updates to the backup components that were assigned responsibility for

the portions of data to which the data updates were made.

1	29. The article of manufacture of claim 27, wherein each of the backup
2	components that is reassigned a portion of data and that has data updates for the portion
3	of data mirrors the data updates to another backup component.
1	30. The article of manufacture of claim 27, wherein each of the backup
2	components in the group that had mirrored data to the first backup component mirror data
3	updates to another backup component.
1	31. A system for transferring data using multiple backup components,
2	comprising:
3	means for assigning responsibility for a portion of data to a first backup
4	component; and
5	means for, when a data update for the portion of data is received at the first
6	backup component from a primary source, mirroring the data update to a second backup
7	component that is not assigned responsibility for the portion of data.
1	32. The system of claim 31, further comprising:
2	means for, when the data update for the portion of data is received at the second
3	backup component that is not assigned responsibility for the portion of data from the
4	primary source, forwarding the data update to the first backup component.
1	33. The system of claim 31, further comprising:
2	when the data update for the portion of data is received at the first backup
3	component from the second backup component that is not responsible for the portion of
4	data,
5	means for assigning a sequence number to the data update; and

1	means for acknowledging receipt of the data update by sending the
2	sequence number to the second backup component.
1	34. The system of claim 31, wherein when one of the multiple backup
2	components mirrors the data update to another backup component, further comprising:
3	means for sending a sequence identifier with the mirrored data update; and
4	means for keeping track of which backup component was sent the data update.
1	35. The system of claim 31, wherein when one of the multiple backup
2	components receives a mirrored data update from another backup component, further
3	comprising:
4	means for receiving a sequence identifier with the mirrored data update; and
5	means for keeping track of which backup component sent the data update.
1	36. A system for processing data updates with a group of backup components,
2	comprising:
3	means for determining that a new backup component is active;
4	means for near an end of a consistent transactions set formation period, assigning
5	responsibility for one or more portions of data to each backup component in the group
6	and to the new backup component; and
7	means for during a next consistent transactions set formation period, processing
8	data updates with each backup component in the group and the new backup component.
1	37. The system of claim 36, wherein the new backup component becomes part

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2 of the group of backup components.

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38. 1 A system of processing data updates with a group of backup components, 2 comprising: 3 means for determining that a first backup component in the group is no longer 4 available; and 5 means for reassigning portions of data for which the first backup component had 6 been assigned responsibility to each of the other backup components in the group. 1 39. The system of claim 38, wherein each of the backup components in the group that was mirroring data updates for the first backup component mirrors the data 3 updates to the backup components that were assigned responsibility for the portions of 4 data to which the data updates were made. 1 40. The system of claim 38, wherein each of the backup components that is 2 reassigned a portion of data and that has data updates for the portion of data mirrors the 3 data updates to another backup component.

The system of claim 38, wherein each of the backup components in the

group that had mirrored data to the first backup component mirror data updates to another

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backup component.